

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No. : 10/566,431
Applicant : MASSELINK et al
Filed : January 31, 2006
TC/A.U. : 2828
Examiner :

Docket No. : 3367-101
Customer No. : 6449
Confirmation No. : 5759

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450

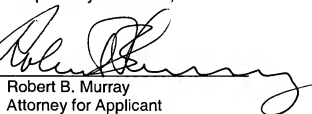
Sir:

On February 9, 2006, we filed a copy of the International Search Report without copies of the references. We now enclose copies of the references 14-28 listed on the form PTO-449. We have also enclosed another copy of the PTO-1449 for the Examiner's convenience.

In the event that any fees are due with this paper, please charge our Deposit Account No. 01-2300.

Respectfully submitted,

By



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RBM/cb
Enclosures

INFORMATION DISCLOSURE STATEMENT BY APPLICANT				<i>Complete if Known</i>	
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				First Named Inventor	MASSELINK et al
				Group Art Unit	2828
				Examiner Name	
				Confirmation No.	5759
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U.S. PATENT DOCUMENTS

[illegible]

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

*Unique citation designation number. ¹See attached Kinds of U.S. Patent Documents. ²Enter Office that issued the document, by the two-letter code. ³For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁴Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁵Applicant is to place a check mark here if English language translation is attached. AB indicates that only an English language abstract is attached.

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Sheet	2	of	4	Attorney Docket Number	3367-101

FOREIGN PATENT DOCUMENTS							
Examiner Initials*	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	T ⁶
		Office ³ Code	Number ⁴	Kind ⁵ (if known)			
	11.	GB	2 352 087	A	Toshiba Res Europ Ltd.	1/17/01	
Examiner Signature	/Matthew Reames/				Date Considered	09/24/2008	

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ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /M.R./

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NON PATENT LITERATURE DOCUMENTS				
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²	
	12.	Mikhailov SA., "A New Type of Tunable Solid-State Far-Infrared Lasers", CONF LASERS ELECTOR OPT EUR TECH DIG, 14 September 1998, pg. 92		
	13.	Walter et al., "Room-temperature continuous photopumped laser operation of coupled InP quantum dot and InGaP quantum....", APPLIED PHYSICS LETTERS, VOL. 79, No. 13, 24 September 2001., pgs. 1956-1958.		
	14.	Asahi H., "Self-Organized Quantum Wires and Dots in III-V Semiconductors", ADVANCED MATERIALS, vol. 9, no. 13, 3 November 1997, pgs. 1019-1026.		
	15.	Belyaev et al., "Positively charged defects associated with self-assembled quantum dot formation", APPLIED PHYSICS LETTERS, vol.76, no. 24, 12 June 2000, pgs. 3570-3572.		
	16.	B.F. Levine "Quantum-Well-Infrared Photodetectors", Journal of Applied Physics 74, R1-R81, 1993.		
	17.	F. Capasso et al. "Quantum Cascade Lasers: "Ultra-high-Speed Operation, Optical Wireless Communication, Narrow Linewidth, and Far-Infrared Emission", IEEE Journal of Quantum Electronics 38, 511 -532, 2002.		
	18.	J. Phillips et al. "Far-Infrared Photoconductivity in self-organized InAs Quantum Dots ", Applied Physics Letters 72, 2020-2022, 1998.		
	19.	J. Phillips et al. "Self-Assembled InAs-GaAs Quantum-Dot Intersubband Detectors", IEEE Journal of Quantum Electronics 35, 936-943, 1999.		
	20.	H.C. Liu et al. "Quantum Dot Infrared Photodetectors", Applied Physics Letters 78, 79 -81, 2001.		
	21.	L. Rebohle, et al. "Energy Level Engineering in InAs Quantum-Dot Nanostructures", Applied Physics Letters 81, 2079-2081, 2002.		
	22.	B.F. Levine, et al., "InGaAs/InAlAs multiquantum well intersubband absorption at a wavelength of $\lambda = 4.4 \mu\text{m}$ ", Applied Physics Letters 52 (18) May 2, 1998, pgs. 1481-1483.		
	23.	G. Hasnain, et al., "Mid-infrared detectors in the 3-5 μm band using bound to continuum state absorption in InGaAs/InAlAs multiquantum well structures", Applied Physics Letters 56 (8), February 19, 1990, pgs. 770-772.		

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	24.	P.M. Mooney, "Deep donor levels (DX centers) in III-V semiconductors", Journal of Applied Physics, 67 (3), February 1, 1990, pgs. R1-R26.	
	25.	C. Sirtori, et al., "Quantum wells with localized states at energies above the barrier height: A Fabry-Perot electron filter", Applied Physics Letters 61 (8), August 24, 1992, pgs. 898-900.	
	26.	Chung et al., "Coupled strained-layer InGaAs quantum well improvement of an InAs quantum dot....", APPLIED PHYSICS LETTERS, vol. 79, no. 27, 2001, pgs. 4500-4502.	
	27.	Faist et al., "Bound-to-Continuum and Two-Phonon Resonance Quantum-Cascade Lasers for High Duty Cycle, High-Temperature Operation", IEEE Journal of Quantum Electronics, vol. 38, no. 6, June 2002, pgs. 533-546.	

Examiner Signature	/Matthew Reames/	Date Considered	09/24/2008
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